

Report of a Working Group on Cucurbits

Second meeting of the ECPGR Activity CUCURBITLOCAL

Exploitation of Cucurbita local germplasm for sustainable agriculture

28 October 2021, virtual, via google.meet

**Report prepared by:
Maria Ercolano**

Present:

Maria Ercolano, Italy (Activity Coordinator)
Ulrike Lohwasser, Germany
Hela Chikh Rouhou, Tunisia

Unable to attend:

Dan Mihai Giurca, Romania
María Belén Picó Sirvent, Spain

The Coordinator, M. Ercolano, welcomed the partners and introduced the meeting's Agenda. She gave an overview of project activities, focusing on the next planned activities. In particular, she pointed out that a project report has to be prepared by the end of the year and a revision of descriptors should be performed (Output 1). Subsequently, she presented the results of the activities carried out by UNINA in the first year. Activities were modified due the late project funding.

A preliminary evaluation of ten Italian *Cucurbita pepo* landraces was performed in greenhouse. Next year a full evaluation will be performed in open field and a low input trial with selected project accessions will be conducted.

Ulrike gave an overview of IPK activities and presented the data recorded for 39 *Cucurbita* accessions including *C. maxima*, *C. pepo*, *C. argyrosperma*, *C. moschata* and *C. melanosperma* during this year. The characterization for fruit and seed traits is still ongoing. Ulrike received a plaudit for the high number of *Cucurbita* accessions (1051) conserved at IPK, 553 of which are landraces.

Hela reported results of the characterization of ten Tunisian accessions of *C. maxima*, *C. pepo* and *C. moschata*. The accessions were previously collected from farmers few years ago. She performed morphological characterization and a first evaluation under low watering

regime, as well as of powdery mildew tolerance, since the plants were challenged by such disease. Such information can be valuable to select accessions for diverse agroclimatic and stressful conditions.

The partners were quite satisfied of descriptors used, since they have been able to capture the broad diversity assessed, but additional descriptors for specific needs could be added (i.e. resistance traits). For the time being, the group did not suggest a revision of the *Cucurbita* descriptors.

The discussion moved on seed exchange for the next year activity. Each partner agreed to send two *Cucurbita pepo* accessions to the others before January 2022, using an SMTA and the phytosanitary certificate required outside the European Union.

Selection of AEGIS accessions had been already performed at IPK and it is starting in Italy, while information from other European partners is missing. Finally, the group commented about the excellent status of *Cucurbita* local germplasm conserved at IPK, while the status of the other national genebanks participating to the project is missing. All partners will share their presentations and will make a report on activities performed in the first year via e-mail to the Coordinator by the end of November 2021.